

# Consensus Forecast: Aligned Demand Forecast for Planning and Procurement

The Consensus Forecast is an aligned demand forecast in which the assessments of sales, marketing, production, logistics and procurement are consolidated into a binding planning figure. For technical buyers it is the central data basis for order volumes, framework agreements and capacity alignment with suppliers. The term describes less a single method than a lived process that makes planning deviations visible early and brings sales targets, production planning and procurement onto the same page.

## Key facts

- A Consensus Forecast consolidates several disciplinary forecasts (sales, production, finance, procurement) into a single planning figure.
- It is typically structured monthly or on a rolling basis for horizons of three to eighteen months and is maintained as a volume-mix forecast.
- For procurement, it forms the basis for the delivery schedule, framework volumes, lot size optimisation and negotiating positions.
- Forecast quality is typically measured using MAPE, Forecast Bias and planning adherence by product group.
- Without clear responsibilities and escalation rules, there is a risk that the Consensus Forecast becomes a diplomatic compromise with no informative value.

## Definition: Consensus Forecast

A Consensus Forecast is a company's consolidated sales or demand forecast, supported by all participating functions. It is created by systematically comparing individual forecasts – such as the sales pipeline, the statistical time series forecast and the production-side capacity view – discussing deviations and converging on a common figure.

## Distinction from other types of forecast

The Consensus Forecast is not identical to a statistical forecast derived solely from history. It also differs from the pure sales forecast, which usually contains optimistic pipeline assumptions, and from the budget, which depicts financial targets rather than physical volumes. In practice, the statistical forecast often serves as a neutral reference value against which the discussed assessments are measured.

- Statistical forecast: data basis is history, methodically reproducible
- Sales forecast: market-oriented, sometimes overestimated
- Consensus Forecast: binding planning figure in the S&OP process
- Budget: financial view, usually annual and less volume-based

## Position within the S&OP process

The Consensus Forecast is the core result of the demand planning stage within Sales and Operations Planning (S&OP). It forms the interface between market and supply: the supply planning built upon it determines utilisation, staffing and procurement requirements. Without an aligned forecast, capacity planning and material scheduling fall into conflict because each function follows its own assumptions.

## Methods and approach in the Consensus Forecast process

A functioning Consensus Forecast follows a recurring cycle with clear roles, deadlines and documentation. The typical cadence is monthly, supplemented by quarterly strategic checks over longer horizons.

### Forecast structure and granularity

In practice, the Consensus Forecast is structured as a volume-mix forecast: sales volumes by product family, region and relevant sales channels, frequently with horizons between six and eighteen months. The granularity must match the planning decision – important for procurement is that volume-relevant assemblies and purchased parts are represented in the forecast or can be derived from it, for example via bill-of-materials explosion.

### Consensus building and responsibilities

The process begins with data preparation (history, open orders, pipeline, statistical forecast). Demand planning, sales and marketing then discuss deviations, justify adjustments and document assumptions. The supply check with production and procurement reviews feasibility and material availability. The final alignment takes place in the monthly review, often chaired by the supply chain or sales director.

- Adjustments only with documented justification and accountability
- Statistical forecast as a benchmark against emotional overwriting
- Escalation rule for unresolved differences before the review meeting
- Versioning of each forecast iteration for later analysis

### Derivation for procurement and manufacturing

From the consolidated forecast, procurement derives demand quantities per supplier and commodity range, with safety stock and safety lead-time buffers responding to planning uncertainty. The forecast is translated into the delivery schedule, which provides suppliers with binding volume bands and call-off logic. With long procurement lead times and limited ramp-up capacities, it also supports capacity planning and the start of production (SOP) of new products.

## Key KPIs for forecast quality and process quality

A Consensus Forecast can only be steered if its quality is measured. The metrics should not serve to justify individual departments, but to uncover systematic biases.

### Forecast quality metrics

Common measures are MAPE (Mean Absolute Percentage Error), Forecast Bias as an indicator of systematic over- or underestimation, and Forecast Value Added, i.e. the value added by manual adjustment compared with the statistical forecast. In practice, MAPE values typically range between 5 and 30 per cent depending on product type; lower values are achievable for stable series parts, while high uncertainties are normal in project business.

## Process and procurement metrics

In addition to forecast quality, the timeliness of the forecast process, the proportion of documented adjustments and the agreement between forecast and actual call-offs in the delivery schedule matter. Also relevant for procurement are the service level by product group supported by the forecast and inventory development, because over-forecasted volumes tie up capital in warehousing and inventory.

## Risks and controls in the Consensus Forecast

The greatest risks lie not in the statistics but in the organisation: politically motivated adjustments, lack of accountability, and a forecast that is maintained multiple times.

### Typical sources of error

Common errors are optimistic pipeline inflation on the part of sales, overwriting of the statistical forecast without sound market information, and subsequent manipulation to hit targets. Shadow planning also arises when production or procurement keeps its own figures in parallel because the Consensus Forecast is not trusted. Missing documentation of assumptions prevents error causes from being analysable later.

### Controls and governance

Effective controls include a clear process ownership of the forecast, binding release by a named decision-making authority, a change history with mandatory justification, and regular bias analyses. When dealing with suppliers, a clear distinction should be made between binding call-off quantities and non-binding forecast bands within a Service Level Agreement (SLA); committed quantities may be contractually binding and should be reviewed legally on a case-by-case basis. Confidentiality must also be observed when volume- and product-specific forecast data is shared with suppliers.

## Current developments: automation and integrated planning

The Consensus Forecast is changing through digitalisation: machine forecasting models and integrated planning platforms shift the manual work from number generation to the discussion of assumptions.

### AI-supported forecasting and data integration

Modern demand planning approaches use machine learning methods that incorporate external factors such as the order pipeline or seasonal patterns in addition to history. What remains important: the model does not replace the consensus but provides an objective starting point. The prerequisite is data quality – cleansed sales histories, consistent spend taxonomy and material master data, as also required for spend analytics.

### Closer / vendor-managed collaboration with suppliers

Increasingly, forecast data is shared directly with strategic suppliers in order to shorten lead-time windows and jointly pursue lot size optimisation. This requires supplier enablement, uniform data formats and clear confidentiality rules. For international procurement structures, trade- and sanctions-related checks such as supplier sanction screening also play a role when forecast-driven volumes activate new sources of supply.

## Typical metrics

### **MAPE (forecast error): typically 5–30 %**

depending on product type; lower for series parts, higher for project business

### **Forecast Bias: close to 0 % (rule of thumb: below $\pm 5$ %)**

to reveal systematic over- or underestimation

### **Planning adherence of forecast process: > 95 % of cycles on time**

measures discipline of the monthly process

### **Forecast Value Added: positive value added versus statistical model**

shows whether manual adjustments help or harm

### **Service level by product group: typically 95–99 %**

supported by forecast-driven demand planning

## Practical example

A mid-sized machinery manufacturer with around 400 employees struggled with divergent planning figures: sales reported ambitious sales volumes, production planned conservatively, and procurement ordered assemblies by gut feeling. The result was excessive inventory of critical purchased parts and occasional supply shortages of fast movers. The company introduced a monthly consensus forecast cycle with a statistical reference forecast, documented adjustments and joint release.

- Introduction of a rolling 12-month forecast per product family with a monthly consensus round
- Derivation of a band-based delivery schedule for the ten strategically most important suppliers
- Bias evaluation by sales region to mitigate systematic overestimation
- Linking the forecast to lot size optimisation and safety stock planning for A-parts

## Conclusion

The Consensus Forecast is more than a number: it is a steering instrument that brings market assumptions, manufacturing capacity and procurement requirements onto the same page. Its value arises from discipline – clear roles, documented assumptions and measurable quality metrics such as MAPE and Bias. For procurement, it provides the reliable basis for delivery schedules, framework agreements and negotiating positions. Companies that consistently live the process typically reduce inventory while simultaneously increasing delivery reliability. What is decisive is establishing the forecast as a shared truth rather than the sum of departmental wish figures.

## Frequently asked questions

### **What is a Consensus Forecast?**

A Consensus Forecast is an aligned, consolidated demand or sales forecast of a company, on which sales, production, logistics, finance and procurement work together. It is usually created monthly as part of S&OP and used as a binding planning figure for all downstream processes. Unlike the statistical forecast, it incorporates market knowledge and explicit assumptions of the participants.

### **How do you create a Consensus Forecast step by step?**

A typical cycle is monthly: first, history, open orders and a statistical forecast are prepared. Sales and demand planning then discuss deviations and document adjustments with justification. Production and

procurement review feasibility and the material side; a defined authority then releases the final planning figure.

### **Which metrics measure the quality of a forecast?**

Common metrics are MAPE for percentage deviation, Forecast Bias for systematic over- or underestimation, and Forecast Value Added for the value added by manual adjustments. In addition, process metrics such as planning adherence and the agreement between forecast and call-offs in the delivery schedule are used. The values should be considered separately by product group, as project and series business show different levels of accuracy.

### **What benefit does the Consensus Forecast have for procurement?**

The forecast provides volume-based planning certainty for framework agreements, delivery scheduling and lot size decisions, and improves the negotiating position through reliable volumes. It enables lead times to be covered and safety stock to be sized in a targeted manner rather than across the board. It also allows strategic suppliers to be involved early in capacity planning and the start of production (SOP).

### **How does the Consensus Forecast differ from the budget?**

The budget is an annual financial target with a focus on revenue and costs, while the Consensus Forecast depicts monthly physical volumes and mix. The two can match, but need not – the forecast serves operational steering, the budget target management. In practice, deviations between forecast and budget are explicitly addressed in the S&OP review.